



JC05 Rec'd PCT/GB99/03692 12 MAR 2002

PCT

BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: The U.S. national phase application (Serial No. unknown) corresponding to International Application No. PCT/GB99/03692

#8
4/29/02
7c

International Filing Date: November 8, 1999

Priority Application: GB9824246.4

International Publication No.: WO 00/27645

Priority Date: Nov. 6, 1998

International Publication Date: May 18, 2000

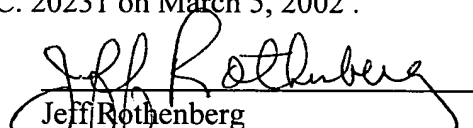
U.S. Examiner: Unknown

Applicant: Alexander Rollo Spowart

Group Art Unit: Unknown

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Attn: Office of Petitions, Washington, D.C. 20231 on March 5, 2002 .


Jeff Rothenberg
Attorney for Applicant
Reg. No. 26,429

Date of Signature: March 5, 2002

Commissioner for Patents
Washington, D.C. 20231

Attention: Office of Petitions

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TC 1700

PROTEST UNDER 37 C.F.R. 1.291(a)

Dear Sir:

Protestor believes that a U.S. national phase application corresponding to the above-identified international application (cover page enclosed) is pending before the United States Patent and Trademark Office, and requests that this Protest be entered in said U.S. national phase application and considered by the Examiner. Protestor is not aware of the serial number assigned to the national phase application but believes that this Protest is being submitted prior to the date of publication or mailing of a Notice of Allowance in the U.S. national phase application. Accordingly, this Protest is believed to be timely filed.

A listing of the patents, publications and other items of information relied upon for this Protest is enclosed, along with a copy of each listed patent, publication or other item of information. An explanation of the relevance of each listed item is presented below.

A copy of this protest including all attachments, has been transmitted by airmail to the Applicant, at the address specified on the published international application. A copy of the Protest is being served on the Applicant since Protestor is not aware of an attorney or agent representing the Applicant. In the event that the Patent Office believes that a copy of this Protest should be served on an attorney or agent of the Applicant, a duplicate copy is enclosed herewith.

A concise explanation of the relevance of each cited reference follows:

US4442170 (granted in 1984) discloses a "Security document (*or "security paper"*) with security features in the form of luminescing substances" (title, abstract, and first paragraph in column 1 in US4442170). From Examples 1 and 2 in column 5 of US4442170, Europium-activated Yttrium oxysulphide is calcined, and ground to a fine powder (i.e. 'micronised') to form a security pigment suitable for mixing into a printing ink. (Per lines 1-3 on page 9 of the subject published International Application WO 00/27645A1, the addition of dopants to standard offset litho printing inks is known to those skilled in the art.) The pigment of Examples 1 and 2 in US4442170 shows no luminescence in response to UV excitation, but responds at a wavelength of 630 manometers to photonic excitation of the same wavelength. According to "Chambers Science And Technology Dictionary" (1991 edition), visible light has a wavelength range of 780-380 manometers. US4442170 thus discloses a security pigment based on an inorganic compound of Europium having a visible response to visible-wavelength photon radiation.

From Example 3 in columns 5-6 of US4442170, Ytterbium-activated Lanthanum oxide is calcined, and micronised to form a security pigment responding at a wavelength of 950 manometers to photonic excitation of the same wavelength.

It is clearly desirable for pigment-incorporating glasses to be transparent (otherwise the pigment would be encapsulated in light-impermeable material), and it is known for transparent glasses to be formed from silicates, phosphates, and borates (see lines 24-26 on page 10 of the subject published International Application WO 00/27645).

US4442170 discloses grinding of calcined dopant to a fine powder suitable for mixing into printing ink, and the effects of mixing of powders of various particle sizes into printing inks are known to persons skilled in the art.

GB2035208A (published in 1980) concerns anti-counterfeiting measures, and discloses documents with covert security features in the form of coatings that can be made invisible but which respond in distinctive ways to optical excitation (lines 49-55 on page 2, and lines 44-65 on page 3, of GB2035208A). Moreover, per lines 44-60 on page 3 of GB2035208A the security feature is concealed from counterfeiters' investigations. Per lines 111-121 on page 2 of GB2035208A, the preferred security material is Yttrium oxide dosed with Europium oxide, because of its visible response to optical excitation, albeit excitation at UV wavelengths of under 300 nanometers.

EP0202902A1 (published in 1986) concerns anti-counterfeiting measures applied to ceramic pieces, or to other articles that are not specified but which implicitly include bar-codable articles in view of the 10th-13th lines on page 2 of EP0202902A1 when read in conjunction with the preceding passage from the second-last line on page 1 to the 9th line on page 2 of EP0202902A1. "Documents" as defined in the subject application PCT/GB99/03692 are articles that are inherently bar-codable, and hence the techniques disclosed in prior-published EP0202902A1 are directly relevant to the particular problems sought to be solved in PCT/GB99/03692. According to the first three lines on page 6 of EP0202902A1, the anti-counterfeiting materials may include Ytterbium and Europium, and the security markings are printed according to the first six lines on page 5 of EP0202902A1 and also according to the 16th-26th lines on page 8 of EP0202902A1.

WO98/40224A1 (published on 17th September 1998) describes a method of providing articles with a covert security feature that is normally invisible to the human eye, but which is capable of being rendered visible when illuminated with polarized visible light. The articles are of glassy thermoplastic polymeric material, and are packaged goods within the meaning of "documents" as defined in subject application PCT/GB99/03692.

WO94/16902A1 (published in 1994) describes, and claims 13 and 14 particularly claim, methods of providing documents with covert security features that are normally

invisible to the eye, but which can be rendered visible by selective illumination, the covert security features being markings applied as ink.

US5372387 (granted in 1994) discloses documents provided with covert security features that are normally invisible due to being shielded by a normally opaque layer but which can be inspected under visible light by temporarily heating the shielding layer to render it transparent (abstract and lines 49-55 in column 1 of US5372387).

On 15th July 1997 (i.e. well before the filing date of subject application PCT/GB99/03692), Quantum Glass Limited made a presentation to members of a commercial organization entitled "Task Force A". The presentation was *not* subject to conditions of confidence, and accordingly the information disclosed to the audience during the presentation is in the public domain. A copy of a written summary of this information, and which was used as an aide-memoire by the presenter, accompanies this Protest. Copies of this summary were distributed to members of the audience at the Task Force A presentation, and no conditions of confidentiality were applied to these distributed summaries. The following discussion is based on the written content of that summary. (For reasons that will become apparent later, this summary is referred to as "summary 1").

The Quantum Glass presentation to Task Force A on 15th July 1997 described the "SPECTRALESEN" security system for banknotes. ("SPECTRALESEN" is a Trade Mark that was registered in the United Kingdom on 7th July 1997). The "SPECTRALESEN" security system provides covert security features for banknotes, and consist of micronised dopants incorporated into the printing inks used to print the banknotes (summary 1, pages 3 and 5). The security features are covert because they are normally transparent (summary 1, page 6, middle paragraph). The security features work by producing a characteristic response to infra-red light (summary 1, last paragraph on page 6, and graph on page 7). Specifically, the dopants absorb in narrow infra-red bands within a spectrum of wavelengths (2000-900 nanometers), and the spectrum of absorption bands can be tuned (summary 1, pages 8-10). Thus the "SPECTRALESEN" system that was described in a printed publication in 1997 is the same as the invention broadly claimed in PCT/GB99/03692, *except* that the "SPECTRALESEN" system works in the infra-red band of wavelengths (2000-700 nanometers) rather than in the adjacent

band of visible wavelengths (780-380 nanometers). As previously detailed in this Protest, prior-published US4442170 discloses a security pigment based on an inorganic compound of Europium having a visible response to visible-wavelength photon radiation. US4442170 also discloses analogous responses in the infra-red range of wavelengths (see e.g. Example 3 in US4442170). Thus US4442170 discloses covert security features that respond in selected narrow bands in both visible and infra-red wavelength ranges. When this prior disclosure is combined with the prior disclosure of the "SPECTRALESEN" system, the result is the invention of PCT/GB99/03692.

Quantum Glass Limited purchased equipment from Control Development, Inc. which equipment was supplied on 15 April 1997 for use in reading printed ink spectra. A letter dated 5 December 2001 confirming this purchase and listing the materials is enclosed.

A purchase order dated 21 April 1997 (copy enclosed) was raised by the Bank of England Printing Works to Quantum Glass Limited requesting that they build and supply a detector in accordance to a specification agreed between the Bank of England Printing Works and Quantum Glass Limited on 15 January 1997. A copy of a letter dated 3 April 1997 to the Project Leader of the Bank of England Printing Works is enclosed.

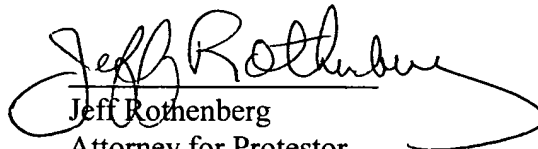
Quantum Glass Limited made a further and essentially similar presentation of the "SPECTRALESEN" system to "Seagram PLC" on 3rd November 1997 *without* a condition of confidentiality being imposed on the audience. Accordingly the information disclosed to the audience during this second presentation is also in the public domain. A copy of a written summary of this information, and which was used as an aide-memoire by the presenter, accompanies this Protest. Copies of this summary were distributed to members of the audience at the Seagram presentation, and no conditions of confidentiality were applied to these distributed summaries. The following discussion is based on the written content of that summary. (In order to distinguish the latter summary from the summary previously quoted, the latter summary will be referred to as "summary 2").

Presentations were made on 22 January 1998 and 7 April 1998 with the Association for Payment Clearing Services (APACS). No confidentiality agreements were signed in advance of such presentations. APACS is the representative body for all

the British clearing bodies. The presentations were similar to those previously discussed above.

The information contained in the second presentation (summary 2) is essentially the same as in the first presentation (summary 1), though with a different emphasis due to the primary interest of Seagram being in the application of covert security features to documents and products for their authentication (summary 2, page 6, first paragraph). It is to be noted that such documents and products, along with banknotes, are "documents" within the definition in PCT/GB99/03692 of entities to which the claimed invention could be applied. Given the essential similarity of information in the second presentation to the information in the first presentation (both of which predate by more than one year the filing of PCT/GB99/0392) when the prior disclosures of US4442170 are combined with the second prior disclosure of the "SPECTRALESEN" system, the result is the invention of PCT/GB99/03692.

Respectfully submitted,


Jeff Rothenberg
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Reg. No. 26,429

Dated: March 5, 2002

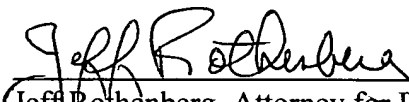
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CERTIFICATE OF SERVICE

This is to certify that a true and accurate copy of this Protest was transmitted by Air Mail to Applicant:

Alexander R. Spowart
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on March 5, 2002.



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